CLAIMS

We claim:

1. A method for identifying unending transactions, the method comprising:

monitoring an interface;

determining whether a transaction has timed out; and

flagging the transaction if it is determined that the transaction has timed out.

2. The method of claim 1, wherein monitoring an interface comprises monitoring a point-to-point (P2P) link network.

3. The method of claim 1, wherein monitoring an interface comprises monitoring a point-to-point (P2P) link network of a register transfer language (RTL) simulator.

4. The method of claim 1, wherein determining whether a transaction has timed out comprises consulting a pending transaction list.

5. The method of claim 4, wherein determining whether a transaction that has timed out further comprises identifying a recorded time out time and determining if that time has been exceeded.

6. The method of claim 1, wherein flagging the transaction comprises failing a case so as to place the transaction in a category of cases that are to be debugged.

7. The method of claim 1, wherein flagging the transaction comprises generating debug information that provides details of the transaction including at least one of an identity of the transaction, a time failure to complete was determined, and an action that was missing for the transaction to complete.

8. The method of claim 1, wherein flagging the transaction comprises presenting information contained in a header of a received packet to a user.

9. The method of claim 1, further comprising removing the transaction from a pending transaction list.

10. A method for identifying unending transactions, the method comprising:

monitoring an interface;

identifying a packet that arrives on the interface;

determining whether the packet pertains to a transaction contained in a pending transaction list; and

determining when the transaction should be completed if the transaction is not contained in the pending transaction list.

11. The method of claim 10, wherein monitoring an interface comprises monitoring a point-to-point (P2P) link network.

12. The method of claim 10, wherein monitoring an interface comprises monitoring a point-to-point (P2P) link network of a register transfer language (RTL) simulator.

13. The method of claim 10, wherein determining whether the packet pertains to a transaction contained in a pending transaction list comprises extracting a transaction identifier (ID) from the packet and determining whether the transaction ID is contained in the pending transaction list.

14. The method of claim 10, wherein determining when the transaction should be completed comprises inputting a packet arrival time and a transaction type into a time-out function.

15. The method of claim 10, wherein determining when the transaction should be completed comprises using a packet arrival time and a transaction type to look up a time out time in a table.

16. The method of claim 10, further comprising recording a time out time in the pending transaction list for the transaction to which the packet pertains.

17. A system for identifying unending transactions, the system comprising:

means for monitoring an interface;

means for identifying packets that arrive on the interface;

means for determining when a transaction should be completed; and

means for determining when a transaction has timed out.

18. The system of claim 17, wherein the means for monitoring an interface comprise means for monitoring a point-to-point (P2P) link network.

19. The system of claim 17, wherein the means for determining when a transaction should be completed comprise a time-out function.

20. The system of claim 17, wherein the means for determining when a transaction should be completed comprise a look up table.

21. The system of claim 17, wherein the means for determining when a transaction has timed out comprise means for determining a time out time from a pending transaction list using a transaction identifier (ID).

22. The system of claim 21, wherein the means for determining a time out time comprise means for identifying a recorded time out time stored in the transaction list and means for determining if that time has been exceeded.

23. The system of claim 17, further comprising means for flagging unending transactions.

24. A virtual bus interface (VBI) stored on a computer-readable medium, the virtual bus VBI comprising:

logic configured to monitor a point-to-point (P2P) interface;

logic configured to identify packets that arrive on the P2P interface;

logic configured to determine a time out time for a transaction to which a packet pertains; and

logic configured to determine when a transaction has timed out.

25. The VBI of claim 24, wherein the logic configured to determine a time out time comprises a time-out function.

26. The VBI of claim 24, wherein the logic configured to determine a time out time comprises logic configured to look up times contained in a table.

27. The VBI of claim 24, wherein the logic configured to determine when a transaction has timed out comprises logic configured to determine a time out time from a pending transaction list using a transaction identifier (ID).

28. The VBI of claim 27, wherein the logic configured to determine a time out time comprises logic configured to identify a recorded time out time stored in the transaction list and logic configured to determine if that time has been exceeded.

29. The VBI of claim 24, further comprising logic configured to flag unending transactions.

30. A processor architecture verification system, comprising:

a register transfer language (RTL) simulator that simulates operation of a processor and generates a first output in a first format, the RTL simulator including an interface;

a golden simulator that simulates operation of the processor and generates a second output in a second format;

a translator that translates at least one of the outputs for comparison with the other output, the translator including a virtual bus interface (VBI) that comprises logic configured to monitor a the RTL simulator interface, logic configured to determine a time out time for a transaction to which a packet on the RTL simulator interface pertains, and logic configured to determine when a transaction has timed out; and

a comparator that compares the first and second outputs after translation of the at least one output.

31. The system of claim 30, wherein the logic configured to determine a time out time comprises a time-out function.

32. The system of claim 30, wherein the logic configured to determine a time out time comprises logic configured to look up times contained in a table.

33. The system of claim 30, wherein the logic configured to determine when a transaction has timed out comprises logic configured to determine a time out time from a pending transaction list using a transaction identifier (ID).

34. The system of claim 30, wherein the VBI further comprises logic configured to flag unending transactions of the RTL simulator.